UNITED STATES PATENT AND TRADEMARK OFFICE

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09/725,350	11/29/2000	Kulvir Singh Bhogal	AUS9-2000-0435-US1	8838

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EXAMINER
LETT, THOMAS J

ART UNIT	PAPER NUMBER
2626	

DATE MAILED: 01/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 August 2004*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13 and 15-30* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13 and 15-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1.   Claims 13, 15, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated

by Nomura et al (US Patent 5,327,526).

With respect to claim 13, Nomura et al discloses that the print job manager 5

generates a queue identifier of the accepted print job in accordance with the control

data 100 and places the queue identifier at a selected position in a column (col 4, lines

10-14), which reads on receiving a priority for a network print job wherein the priority for

the network print job is set by a network printer user who has submitted said print job;

and sending the network print job and the priority to a network printing queue.

Claim 14 (cancelled).

With respect to claim 15, Nomura et al disclose that in the print job control

system of this invention as shown in FIG. 4, the printing order checker 7 in the print job

manager 5 sets a printing order in response to the designation by the sort option

designator 4, and the printing order manipulator 8 changes this printing order in

accordance with the directions given by the operator via the printing order changer 9,

and the resulting change in order is finalized as a change in the positions of queue

identifiers on the print queue table 6 (col 4, lines 59-67), which reads on receiving

changes to the priority settings, according to changing circumstances; and sending the

changes to the priority settings to the print queue.

With respect to claim 16, Nomura et al disclose that the printing order

manipulator 8 changes this printing order in accordance with the directions given by the

operator via the printing order changer 9 (col 4, lines 62-65), which reads on the

changes to the priority settings are entered by a network printer user who has submitted

said print job.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set
forth in section 102 of this title, if the differences between the subject matter sought to be patented and
the prior art are such that the subject matter as a whole would have been obvious at the time the
invention was made to a person having ordinary skill in the art to which said subject matter pertains.
Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Nomura et al (US Patent 5,327,526) in view of Yoshida et al (US Patent 6,130,757).

Nomura et al discloses a print job control system that is linked to a local area network

(LAN) or other communications information networks for efficient processing of print

requests generated from a plurality of workstations (col 1, lines 11-15), which reads on

entering priority settings for network print jobs;

the print job manager 5 generates a queue identifier of the accepted print job in

accordance with the control data 100 and places the queue identifier at a selected

position in a column (col 4, lines 10-14), which reads on receiving a new print job and

an associated priority setting into a network printing queue; and

as shown in FIG. 6, the print job manager 5 has a printing order checker 7 which

checks the printing order in accordance with the sort option (col 5, lines 65-68), which

reads on comparing the priority setting of the new print job to a priority of other print jobs

in the network printing queue. Nomura et al does not disclose expressly allowing the

new print job to begin printing without delay if it has the highest priority in the network

printing queue. Yoshida et al discloses that the priorities are automatically assigned to

the jobs each time a job is requested, and a job having the highest priority is executed

immediately (col 3, lines 8-10). Nomura et al and Yoshida et al are analogous art

because they are from the similar problem solving area of interrupting print jobs. At the

time of the invention, it would have been obvious to a person of ordinary skill in the art

to add the feature of Yoshida et al to Nomura et al in order to obtain a method capable

of interrupting a print job. The motivation for doing so would be to expedite a print job in

a queue.

With respect to claim 2, Nomura et al disclose that the jobs are arranged in the

order determined by the sort option designator 4 or by the operator's designation (col 3,

lines 43-44), which reads on the priority settings are entered by a network administrator.

With respect to claim 3, Nomura et al disclose that the jobs are arranged in the

order determined by the sort option designator 4 or by the operator's designation (col 3,

lines 40-51), which reads on the priority settings are entered by a network printer user

who has submitted said print job.

With respect to claim 4, Nomura et al does not disclose postponing the new print

job until higher priority print jobs in the network printing queue have finished printing.

Yoshida et al disclose priorities are automatically assigned to the jobs each time a job is

requested, and a job having the highest priority is executed immediately (col 3, lines 8-

10). Nomura et al and Yoshida et al are analogous art because they are from the

similar problem solving area of managing priority of print jobs. At the time of the

invention, it would have been obvious to a person of ordinary skill in the art to add the

feature of Yoshida et al to Nomura et al in order to obtain a method capable of handling

print job priorities. The motivation for doing so would be to manage a print job in a

queue.

With respect to claim 5, Nomura et al does not disclose suspending a print job

that is currently printing if the new print job has a higher priority; printing the new print

job in full; and resuming the suspended print job. Yoshida et al disclose that it is

possible in this embodiment of the present invention to automatically execute a higher-

priority interrupt job without pressing the interrupt key. It is also possible in this

embodiment of the present invention to automatically resume suspended jobs based on

the priorities. Nomura et al and Yoshida et al are analogous art because they are from

the similar problem solving area of managing priority of print jobs. At the time of the

invention, it would have been obvious to a person of ordinary skill in the art to add the

feature of Yoshida et al to Nomura et al in order to obtain a method capable of handling

print job priorities. The motivation for doing so would be to resume an interrupted print

job.

3.   Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Nomura et al (US Patent 5,327,526) in view of Yoshida et al (US Patent 6,130,757) as

applied to claim 5 above, and further in view of Guerrero et al (US Patent 6,227,531

B1). Nomura et al and Yoshida et al do not disclose using different colored sheets to

separate different print jobs. Guerrero et al disclose the job separation pages comprise

banner pages having different sized, colored and/or indicia-marked single-page jobs

that are inserted between adjacent print jobs in order to visually and/or tactilely identify

such jobs (col 7, lines 58-62). Nomura et al, Yoshida et al and Guerrero et al are

analogous art because they are from the similar problem solving area of managing print

jobs. At the time of the invention, it would have been obvious to a person of ordinary

skill in the art to add the feature of Yoshida et al to Nomura et al in order to obtain a

method capable of separating print jobs in a queue. The motivation for doing so would

be to easily identify print jobs in a stack.

With respect to claim 7, Nomura et al disclose that the jobs are arranged in the

order determined by the sort option designator 4 or by the operator's designation (col 3,

lines 43-44), which reads on the priority settings may be changed, according to

changing circumstances.

With respect to claim 8, Nomura et al disclose that the jobs are arranged in the

order determined by the sort option designator 4 or by the operator's designation (col 3,

lines 43-44), which reads on changes to the priority settings are entered by a network

administrator.

With respect to claim 9, Nomura et al disclose that the jobs are arranged in the

order determined by the sort option designator 4 or by the operator's designation (col 3,

lines 43-44), which reads on changes to the priority setting are entered by a network user.

4.   Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nomura et al (US Patent 5,327,526) in view of Yoshida et al (US Patent 6,130,757) as applied to claim 1 above, and further in view of Reilly (US Patent 5,787,237 A).

With respect to claim 10, Nomura et al and Yoshida et al do not disclose providing a graphical user interface for displaying the estimated time for completing a print job. Reilly discloses that for this print job request call, the parameters stored in the print queue 82 include job information job name, estimated time to print (col 8, lines 14-16). All of the information associated with the print job request call and stored in the print queue 82 may be accessed and displayed by any of the host computers $400_{.0...n}$ connected to the network at any time (col 8, lines 29-33). Nomura et al, Yoshida et al, and Reilly are analogous art because they are from the similar problem solving area of viewing print job completion time. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add the feature of Yoshida et al to Nomura et al in order to obtain a method capable of viewing estimated time of completion of print jobs in a queue. The motivation for doing so would be to enable users to see completion time of a print job.

With respect to claim 11, Nomura et al and Yoshida et al do not disclose sending prompts to users at set time intervals updating the estimated time for completing a print job. Reilly discloses that all of the information associated with the print job request call and stored in the print queue 82 may be accessed and displayed by any of the host

computers $400_{0...n}$ connected to the network at any time (col 8, lines 31-33). Nomura

et al, Yoshida et al, and Reilly are analogous art because they are from the similar

problem solving area of updating users of print job status. At the time of the invention, it

would have been obvious to a person of ordinary skill in the art to add the feature of

Yoshida et al to Nomura et al in order to obtain a method capable of updating users of

completion time of a print job. The motivation for doing so would be to prevent

unnecessary trips to the printer to retrieve a print job.

5.   Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nomura

et al (US Patent 5,327,526) in view of Yoshida et al (US Patent 6,130,757) as applied to

claim 1 above, and further in view of Salgado (US Patent 6,504,621). Nomura et al and

Yoshida et al do not disclose receiving a maximum time limit for postponing a print job,

regardless of its priority. Salgado discloses that the calculation of the number times a

job has been interrupted is a summation of all the times other jobs have interrupted the

job, e.g., a Copy Job has been interrupted at different times by a Fax job, and four

different Print jobs, the MAX # of interrupts was set to 4, hence the MAX # of interrupts

setting has been exceeded (col 14, lines 41-46). Nomura et al, Yoshida et al, and

Salgado are analogous art because they are from the similar problem solving area of

progressing a low priority print job that may be excessively postponed. At the time of

the invention, it would have been obvious to a person of ordinary skill in the art to add

the feature of Salgado to Nomura et al and Yoshida et al in order to obtain a method

capable of processing a low priority. The motivation for doing so would be to allow a

lower priority print job to progress toward being printed.

6.   Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Nomura et al (US Patent 5,327,526) in view of Reilly (US Patent 5,787,237 A).

With respect to claim 17, Nomura et al discloses that the print job manager 5

generates a queue identifier of the accepted print job in accordance with the control

data 100 and places the queue identifier at a selected position in a column (col 4, lines

10-14). Nomura et al does not disclose receiving the estimated time for completing a

print job; and displaying the estimated time for completing a print job to a user.

Reilly discloses that for this print job request call, the parameters stored in the print

queue 82 include job information job name, estimated time to print (col 8, lines 14-16).

All of the information associated with the print job request call and stored in the print

queue 82 may be accessed and displayed by any of the host computers $400._{0\ldots n}$

connected to the network at any time (col 8, lines 29-33). Nomura et al and Reilly are

analogous art because they are from the similar problem solving area of viewing print

job completion time. At the time of the invention, it would have been obvious to a

person of ordinary skill in the art to add the feature of Reilly to Nomura et al in order to

obtain a method capable of viewing estimated time of completion of print jobs in a

queue. The motivation for doing so would be to enable users to see completion time of

a print job.

With respect to claim 18, Nomura et al does not disclose receiving a maximum

time limit for postponing a print job, regardless of its priority; and sending the maximum

time limit to the printing queue. Reilly discloses that all of the information associated

with the print job request call and stored in the print queue 82 may be accessed and

displayed by any of the host computers $400_{.0...n}$ connected to the network at any time

(col 8, lines 31-33). Nomura et al and Reilly are analogous art because they are from

the similar problem solving area of updating users of print job status. At the time of the

invention, it would have been obvious to a person of ordinary skill in the art to add the

feature of Reilly to Nomura et al in order to obtain a method capable of updating users

of completion time of a print job. The motivation for doing so would be to prevent

unnecessary trips to the printer to retrieve a print job.

With respect to claim 19, Nomura et al does not disclose displaying the estimated

time for completing a print job is by means of a graphical user interface. Reilly

discloses that for this print job request call, the parameters stored in the print queue 82

include job information job name, estimated time to print (col 8, lines 14-16). All of the

information associated with the print job request call and stored in the print queue 82

may be accessed and displayed by any of the host computers $400_{.0...n}$ connected to

the network at any time (col 8, lines 29-33). Nomura et al and Reilly are analogous art

because they are from the similar problem solving area of viewing print job completion

time. At the time of the invention, it would have been obvious to a person of ordinary

skill in the art to add the feature of Reilly to Nomura et al in order to obtain a method

capable of viewing estimated time of completion of print jobs in a queue. The

motivation for doing so would be to enable users to see completion time of a print job.

With respect to claim 20, Nomura et al does not disclose receiving prompts at set

time intervals updating the estimated time for completing a print job. Reilly discloses

that all of the information associated with the print job request call and stored in the print

queue 82 may be accessed and displayed by any of the host computers $400._{0...n}$

connected to the network at any time (col 8, lines 31-33). Nomura et al and Reilly are

analogous art because they are from the similar problem solving area of updating users

of print job status. At the time of the invention, it would have been obvious to a person

of ordinary skill in the art to add the feature of Reilly to Nomura et al in order to obtain a

method capable of updating users of completion time of a print job. The motivation for

doing so would be to prevent unnecessary trips to the printer to retrieve a print job.

Claim 21 is a computer program product claim and is rejected for the same

reason as that of claim 1.

Claim 22 is a computer program product claim and is rejected for the same

reason as that of claim 2.

Claim 23 is a computer program product claim and is rejected for the same

reason as that of claim 3.

Claim 24 is a computer program product claim and is rejected for the same

reason as that of claim 4.

Claim 25 is a computer program product claim and is rejected for the same

reason as that of claim 7.

Claim 26 is a data processing system claim and is rejected for the same reason

as that of claim 1.

Claim 27 is a data processing system claim and is rejected for the same reason

as that of claim 2.

Claim 28 is a data processing system claim and is rejected for the same reason as that of claim 3.

Claim 29 is a data processing system claim and is rejected for the same reason as that of claim 4.

Claim 30 is a data processing system claim and is rejected for the same reason as that of claim 7.

Response to Arguments

7.   Applicant's arguments filed 17 August 2004 have been fully considered but they are not persuasive.

Response to Argument (Anticipation)

With respect to claim 13, while applicant asserts that Nomura et al does not distinguish between a network user and a network administrator, Examiner notes that Nomura et al's teaching of a network administrator is not different from a network user. A network administrator could be both a user and an administrator/controller of a network and any of the network's peripherals. It is clearly obvious that an operator, user, or network/system administrator can submit a print job and/or change the order of print jobs. Further, Nomura et al teach that "the operator himself can provide the print job manager with a direction for changing the printing order" (col. 5, lines 6-11).

With respect to claim 16, Nomura et al teaches that "the operator himself can provide the print job manager with a direction for changing the printing order" (col. 5, lines 6-11).

Response to Argument (Obviousness)

With respect to claim 1, Applicant clearly claims the beginning of a print job without delay if it has the highest priority in the network printing queue. Both the Nomura et al reference and the Yoshida reference are compatible because they both assign priority to print jobs. Printing priority is an arbitrary judgement/preference by the user and can be dynamic in that a print job which was once a low priority may be changed to a high priority at user discretion. Low priority print jobs in the Nomura reference can become high priority print jobs and the reverse is also true.

With respect to claims 11 and 20, O'Reilly clearly states that the print queue 82 may be accessed and displayed by any of host computers 400... at any time.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Lett whose telephone number is 703-305-8733. The examiner can normally be reached on 7-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached at 703-305-4863. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, DC 20231

or Faxed to:

(703) 872-9314 (for <u>Technology Center 2600 only</u>).

Hand-delivered responses should be brought to:
Crystal Park II
2121 Crystal Drive
Arlington, VA   Sixth Floor (Receptionist).

TJL

MARK WALLERSON
PRIMARY EXAMINER